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FALCONBRIDGE NICKEL MINES LIMITED



24th Annual Report

FOR THE YEAR ENDED
DECEMBER 31st, 1952

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Offices

FALCONBRIDGE NICKEL MINES LIMITED

Head Office — 44 King Street West, Toronto, Ontario

Mining and Reduction Division — Falconbridge, Ontario

FALCONBRIDGE NIKKELVERK A/S — Kristiansand S., Norway

FAHRALLOY CANADA LIMITED — Orillia, Ontario

Transfer Agents and Registrars

CROWN TRUST COMPANY

302 Bay Street, Toronto

393 St. James Street W., Montreal

REGISTRAR AND TRANSFER COMPANY

50 Church St., New York 7, N.Y.

15 Exchange Place, Jersey City 2, N.J.

Solicitors

TILLEY, CARSON, MORLOCK & MCCRIMMON, Toronto

Auditors

CLARKSON, GORDON & Co., Toronto

Sales agents

for Nickel and Copper

BRANDEIS, GOLDSCHMIDT & Co. LTD.

9/13 King William Street, London, England

Correspondents in United States

BRANDEIS, GOLDSCHMIDT & Co. INC.

165 Broadway, New York 6, N.Y.

ANNUAL MEETING OF SHAREHOLDERS

PRIVATE DINING ROOM NO. 8, ROYAL YORK HOTEL, TORONTO,
TUESDAY, MAY 5th, 1953, 11 A.M.

FALCONBRIDGE NICKEL MINES LIMITED

Officers

President

T. LINDSLEY

Vice-President and General Manager

H. J. FRASER

Secretary

R. CAMPBELL

Treasurer

J. C. RIX

Assistant Treasurer

A. W. COOME

Directors

J. M. CUNNINGHAM-DUNLOP

H. J. FRASER

T. LINDSLEY

W. B. MAXWELL

W. S. MORLOCK

Operating Officials

Mining and Reduction Division	-	-	-	R. C. MOTT, <i>Manager</i>
				R. M. OLIVER, <i>General Supt.</i>
Refining Division	-	-	-	S. B. STEEN, <i>Manager</i>
Sales Division	-	-	-	G. S. JEWETT, <i>Manager</i>
Projects Division	-	-	-	J. HUNT, <i>Manager</i>
Comptroller	-	-	-	R. CAMPBELL

* * *

Special Representative	-	-	-	N. A. O'DONNELL
Metallurgical Consultant	-	-	-	A. M. GRONNINGSATER

Falconbridge Nikkelverk Aktieselskap

(Norwegian Refinery — a subsidiary Company)

Directors

S. B. STEEN (Chairman)

H. J. FRASER

A. M. GRONNINGSATER

I. GRONNINGSATER

E. RASMUSSEN

G. LOUS (Alternate)

Fahralloy Canada Limited

(High Alloy Foundry — a subsidiary Company)

Directors

T. G. BEAMENT (President and Managing Director)

H. J. FRASER (Vice-President)

T. LINDSLEY

J. G. HARDY

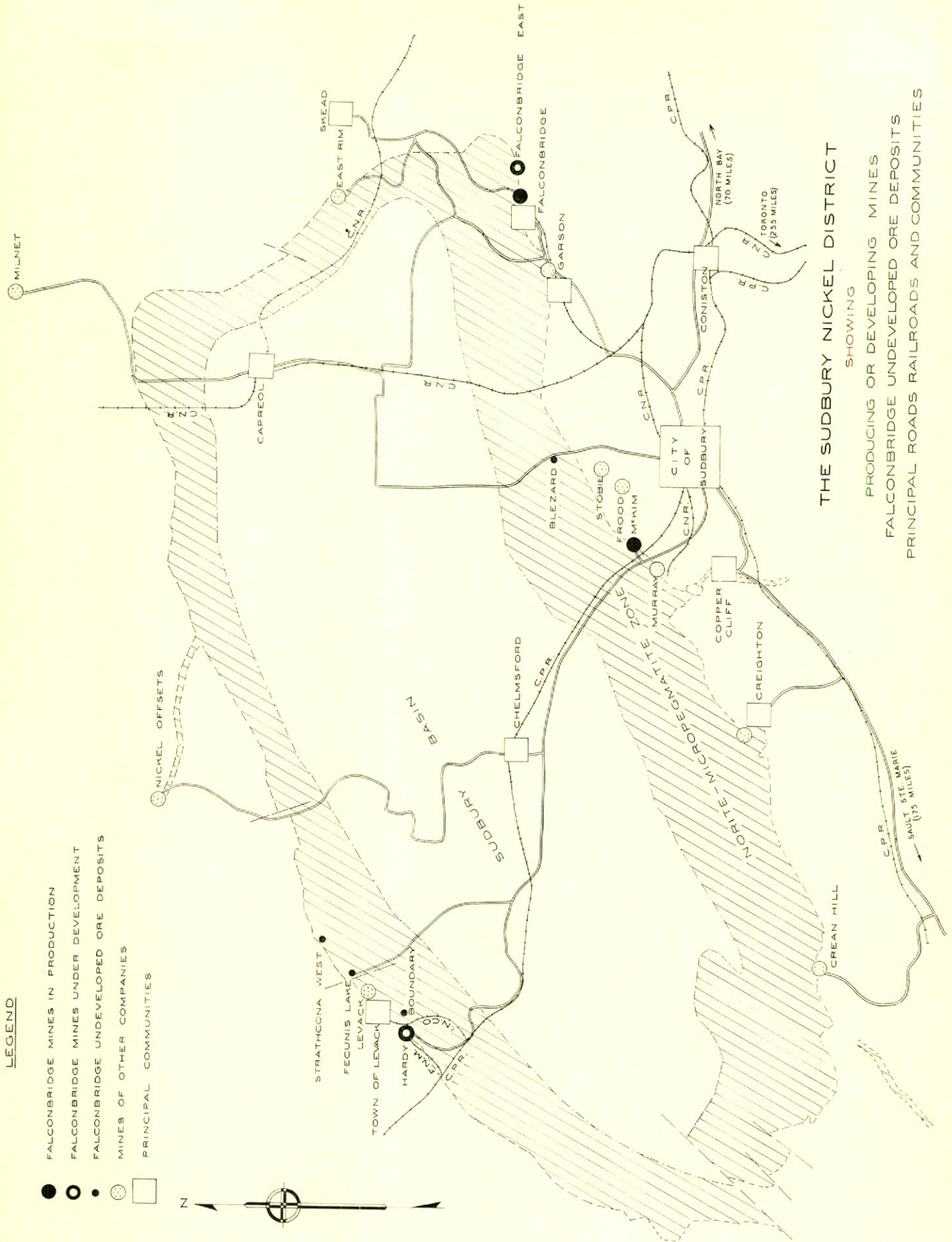
WM. DUNN

LEGEND

- FALCONBRIDGE MINES IN PRODUCTION
- FALCONBRIDGE MINES UNDER DEVELOPMENT
- FALCONBRIDGE UNDEVELOPED ORE DEPOSITS
- MINES OF OTHER COMPANIES
- PRINCIPAL COMMUNITIES



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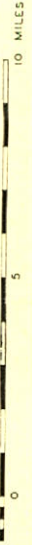


THE SUDBURY NICKEL DISTRICT

SHOWING

- PRODUCING OR DEVELOPING MINES
- FALCONBRIDGE UNDEVELOPED ORE DEPOSITS
- PRINCIPAL ROADS RAILROADS AND COMMUNITIES

SCALE



NET PROFITS	
1948	\$1,502,099
1949	\$1,432,307
1950	\$2,707,566
1951	\$3,010,975
1952	\$2,535,240

GROSS REVENUE	
1948	\$11,508,405
1949	\$11,178,732
1950	\$17,380,316
1951	\$20,782,808
1952	\$24,839,873

PRODUCTION — ORE TREATED	
1948	821,259
1949	941,928
1950	928,650
1951	1,083,670
1952	1,129,489

EXPENDITURES ON PLANT	
1948	\$1,084,001
1949	\$1,092,518
1950	\$1,372,853
1951	\$3,407,331
1952	\$4,507,367

Highlights of the Year

NET PROFIT in 1952 amounted to 69¢ per share on the number of shares outstanding at the end of 1952 or 74¢ per share on the number outstanding at the end of 1951. The latter figure compares with a net profit of 88¢ in 1951 and 79¢ in 1950.

GROSS REVENUES reached a new high for the third consecutive year.

COSTS increased very substantially to a new high.

PRODUCTION of ore, matte and refined metals established new records. Ore in limited quantities produced from other district mines was accepted for treatment in the latter part of the year.

ORE RESERVES showed an increase in tonnages of over 72%, and in combined gross metal content of over 61%.

The change in process at the refinery was successfully accomplished followed by record production. Refined cobalt was being produced in moderate but increasing quantities in the latter half of the year.

Expenditures on mine development and plant construction reached a new peak.

The financial demands of the expansion programs were met by an issue of capital stock to existing shareholders and advances from an agency of the United States Government in conjunction with a sales and production commitment contract.

Report of the Directors to the Shareholders

The twenty-fourth annual report of the Company, together with the auditors' report on the financial statements for the year ended December 31, 1952, is respectfully submitted herewith.

Revenues and Expenses

The net profits of the Company for 1952 amounted to \$2,535,240 or 69¢ per share outstanding at the year-end, which compares with \$3,010,975 and 88¢ per share for 1951. The dividend rate of 50¢ per share established in 1951 was maintained in 1952. The decline in net profits resulted primarily from higher operating costs which were not offset by a corresponding increase in price for nickel, the adverse effect on income of the exchange value of the United States dollar, and the substantially higher provisions for amortizing capital and development expenditures.

Metal sales and other operating revenues at \$24,839,873 were at a record level for the third consecutive year, being well over twice the dollar amounts of either 1948 or 1949. Quantities of metals delivered in all forms were about 15% higher than in the preceding year.

The basic nickel price established in June, 1951, prevailed throughout the remainder of 1951 and the whole of 1952 although within this period there were three upward revisions in wage rates in our Canadian operations and two in our Norwegian operations. Copper prices declined during 1952.

The continuing increase in the cost of equipment and supplies coupled with continuing demands for higher wages, more fringe benefits and shorter working hours are matters for increasing concern while nickel remains at an unrealistically low price.

Reference was made in our report last year to the detrimental effect on the Company's revenue resulting from an appreciation of the exchange value of the Canadian dollar while prices for the Company's

products are established in terms of United States dollars. This condition became more unfavourable in 1952. For the year as a whole sales proceeds in U.S. currency converted into Canadian currency at a rate of about 4.5% less than in 1951.

The amount of development and preproduction expenditures written off and the allowance for depreciation were each higher than in the preceding year by about 50% or a total of \$1,180,000. The rate at which development and preproduction expenditures were written off was increased from \$1.00 per ton of ore treated in 1951 to \$1.50 per ton in 1952. The decision to increase the rate was based on the current rate of such expenditures and on forecasts of future development work which indicated that these expenditures would be heavy for a few years. Depreciation was calculated on the same basis as in the previous year but the values to which the rates applied were materially higher. The use of year-end values involves depreciating equipment whose benefit has not been realized throughout the entire year.

Provision for taxes on income was lower than in 1951. This was due to reduced profits, to the effect of valuing inventory on a life basis, to a larger percentage of profit attributable to the tax-free McKim operations, and to slightly reduced tax rates which followed arrangements between the Federal and Provincial governments. Tax rates on mines imposed by the Province of Ontario continue at the highest of any Province in Canada. Taxes in future years will be higher than otherwise would be the case as a result of the recent decision by the Ontario Government not to continue to extend a tax benefit to new mines which are not presently in production.

Marketing

During 1952 there was a continued heavy demand for all products of the Company and gross income from sales exceeded that of any previous year

despite the fact that no sales of matte were made.

Deliveries of both nickel and copper exceeded

production, resulting in major decreases in year-end inventories of refined metals. Both in volume and value, Company records were set in connection with deliveries of nickel, copper and precious metals.

In the United States, which absorbs more than 60% of the free world's nickel supply, nickel, as well as copper and other materials, continued to be subjected to Governmental price and other controls, which had a restraining effect on prices throughout the year. Although many currency restrictions continued in effect in many of the countries where your Company's products are sold, they did not affect Company sales significantly in this period during which demand exceeded available supplies. The International Materials Conference continued to allocate nickel, copper and cobalt supplies among the various countries of the free world. Since the close of 1952, both copper and cobalt have been freed from such allocation, and it is possible that nickel also may be freed from such allocation later in 1953.

Operations

Production records were again established by the mines, smelter and refinery. These were established during a year when both underground development and plant construction programs were being intensely carried on. Mining and treatment plants in Canada operated continuously throughout the year except for interruptions caused by bringing new units into operation. The process change-over at the refinery in March was effected with a minimum of disturbances to production. Operating difficulties with the new refining process have proved less than might have been expected and are being gradually eliminated or reduced.

Ore treated from Company mines amounted to 1,118,854 tons, an increase over 1951 of more than 3%. In addition, 10,635 tons of ore produced from the East Rim and Milnet Nickel mines were taken into the Company's treatment plants in the latter months of the year. Metals in matte produced by the smelter exceeded the production of the previous year by over 5%, and refinery production exceeded that of 1951 by over 9%.

Labour generally was available in both Canada and Norway, although, as usual, the supply at the

In mid-year the Company's first production of cobalt metal became available for sale, and had a very good reception by the trade. As production grows this metal promises to provide an additional substantial source of income.

During the year the Company executed a contract with the government of the United States requiring the delivery over the nine-year period ending December 31, 1961, of 50 million pounds of nickel together with a portion of the Company's cobalt production. An option for the delivery of up to 25 million pounds additional nickel affords a certain measure of protection against any serious drop in commercial demand during the period involved.

At year-end, demand for all the Company's products continued strong, although there was some easing in the demand for copper and for some of the precious metals. No difficulty is anticipated in marketing all materials produced by the Company during 1953.

refinery was inadequate during the summer months. Suitable skilled labour was scarce and a shortage during the first part of the year of experienced engineers caused some difficulties in carrying out the expansion program.

Delays were experienced in the delivery of some of the more important equipment additions to plant, but otherwise the difficulties of procuring materials have eased.

Hydro electric power was made available at the Hardy mine a few days before the end of the year, replacing the Company's diesel electric plant which had supplied power for development operations up to that time. On occasions more power than was available could have been used at the refinery. Additional blocks of power now under contract will become available to the refinery in due course.

Increasing concern over the supply of adequate quantities of mine timber led to a decision to acquire the outstanding shares of the M. J. Poupore Lumber Company Limited. For many years this operation has supplied the Company with the bulk of its mine

timber requirements. The timber limits are located in the near vicinity of our Falconbridge mine. Operations are planned to provide a uniform quantity of mining timber in perpetuity, although not necessarily the whole of our future timber requirements.

Adequate housing facilities for employees is a continuing problem. In order to encourage established employees to build their own homes on Falconbridge townsite, a wholly owned subsidiary, Falconbridge Realty Limited, was incorporated to financially assist properly qualified employees. The Realty Company's accounts have been consolidated in the financial statements.

A separate report and accompanying financial statements are presented giving the year's results for Fahralloy Canada Limited. The accounts of this wholly-owned subsidiary are not consolidated with those of Falconbridge.

As a result of the production contract signed with the United States Government early in 1952, the entire operation was called upon for maximum production effort not only during 1952 but also for several years in the future. In addition, underground development, construction and installation of new facilities have been scheduled for completion at the earliest possible date. The resultant pressure on the entire organization plus inevitable interferences between construction and production had a temporary adverse effect on costs. Great credit is due to the entire organization for their accomplishments under the difficult conditions of 1952.

FALCONBRIDGE MINE

Ore production by the main Falconbridge mine of 888,082 tons in 1952 compared with 930,164 in the previous year. The underground reserve of broken ore increased by 8,471 tons. During the year 13 stopes were mined out and 15 new stopes were developed or under preparation.

An exploratory drive west from the No. 1 shaft on the 2625 level was extended 1,214 feet without encountering any ore. As conditions permit this drift will be continued westward to explore the long stretch of contact held by the Company.

The more important ore development work in the Falconbridge mine included drives along the main

ore zone for lengths of 924 feet on the 2975 level, 1,845 feet on the 3325 level, 2,362 feet on the 3850 level, and 891 feet on the 4025 level. Average ore conditions were shown by these drives.

After completing the pilot raises in No. 5 shaft, slashing to full size and pouring of concrete rings commenced. Work was completed by the year-end to a point 107 feet below the 3675 level. The ventilation raise was extended to three more levels, the No. 5 fill-pass system two more levels, and the main ore pass to four more levels.

By the year end the revision in hoisting facilities of the main No. 5 shaft had been completed. The new 14 foot cage and skip hoists were operating to the 2800 level in conjunction with the enlarged and revised headframe. Additional compressor capacity was also in operation.

1952 was a difficult production year. Scheduling of surface and underground work at the mine was made difficult by construction work involved in installation of the new hoists, rebuilding of the headframe and the movement of materials underground resulting from the work involved in deepening No. 5 shaft. The inefficiencies of the 40 hour week were first experienced for a full year of operations. High labour turnover during the first part of the year, coupled with the necessity of employing unskilled men, had an adverse effect on production. Another major factor affecting production, costs and efficiency is the heavier ground conditions being encountered with depth and the consequent necessity of an ever increasing proportion of square set stoping.

Falconbridge Mine Statistics

	1952	1951
Ore hoisted	888,082	930,164 tons
Drifting	10,330	14,693 feet
Raising	4,931	4,430 feet
Shaft raising	293	519 feet
Shaft sinking		245 feet
Station cutting	36,018	20,256 cu. ft.
Diamond drilling	24,914	22,587 feet
Shaft slashing	564	feet

EAST FALCONBRIDGE MINE

Excellent progress was achieved throughout the year in this area. The shaft commenced on this

property in 1951 was sunk a further 2,001 feet to a depth of 2,251 feet below the collar and stations were cut.

The 802 drift was extended 1,565 feet to the eastern boundary of the property and disclosed ore of slightly better grade and in substantially greater amounts than had been indicated by previous surface drilling. A cross-cut was driven on the 2800 level near the eastern boundary and used as a station for deep drilling. One hole was completed by the year-end which intersected better than average grade ore at the 3150 level. Additional drilling was planned from this location.

East Falconbridge Mine Statistics

	1952
Drifting	2,699 feet
Raising	217 feet
Shaft sinking	2,001 feet
Station cutting	83,463 cu. ft.
Diamond drilling	5,822 feet

McKIM MINE

Ore production at the McKim mine in 1952 was 45% greater than in 1951, and was of major importance as a contribution to the year's production record.

An easterly drive on the 650 level disclosed and opened a new ore shoot of average mine grade. On the 1175 level drifting was completed to the western boundary and to the present easterly ore limit. A northerly cross cut, 1,139 feet in length, was driven on the 1350 level to provide diamond drill stations for testing the ore zone at depth. This drilling did not show any depth extension of the orebody within the area tested.

The ventilation escapement raise was completed by extension from the 1175 level to the 1350 level.

Provision was made for crushing ore underground by excavation of a station below the 1175 level and installation of the necessary equipment.

McKim Mine Statistics

	1952	1951
Ore delivered	224,774	155,961 tons
Drifting	2,309	3,179 feet
Raising	417	1,023 feet
Station cutting	33,918	6,637 cu. ft.
Diamond drilling	12,884	6,051 feet

HARDY MINE

The shaft was completed in May to its planned depth of 1,427 feet with all stations cut. A permanent steel headframe was then erected and an eight foot hoist, released from the Falconbridge operation, was installed as part of the permanent plant.

Development work was commenced on all levels from the 250 to 1000 levels. Practically all of this work was in waste, and consisted of cross cutting toward the ore body, driving haulage drifts in the hanging wall, and establishing battery charging stations. A main pumping station is being located on the 1000 level and excavation for a crusher station at the 1060 level was under way at the year-end.

Other work at Hardy consisted of completing the surface plant, townsite buildings and mine facilities, as well as construction of a two mile railway spur from the main line of the Canadian Pacific Railway to the property. The only major construction remaining is a conveyor way to transport ore from the headframe to the loading bin at the railway spur. Part of the underground and surface equipment required for the regular development and mining operations was on the property at year-end.

Hardy Mine Statistics

	1952	1951
Shaft sinking	399	1,022 feet
Station cutting	114,156	55,087 cu. ft.
Cross cutting	4,042	137 feet
Raising	441	feet
Diamond drilling	1,345	feet

MILLING AND SMELTING

The expansion program started in 1951 in the mill was virtually completed during 1952. A new rod mill placed in operation during the year substantially increased the capacity of the crushing and grinding circuits. With the installation of larger flotation units and accessory equipment the concentrator is now capable of handling 2,500 to 2,600 tons of mill ore per day.

A fourth converter was installed in the smelter and was in operation by July. Foundations have been prepared for a third blast furnace and settler, delivery of which is expected early in 1953. New matte casting and barrelling facilities are being built as part of the smelter expansion program.

The Falconbridge treatment plants processed 1,129,489 tons of which 695,524 tons, or 61.6%, were milled and the balance smelted direct. The smelter processed 576,718 tons of ores, concentrates and refinery revert. The plants, with few minor exceptions, were in continuous operation throughout the year, and operated at maximum capacity of the installed equipment. However, the treatment plants will not reach the capacity required by present production schedules until the third furnace and accompanying facilities are in operation.

REFINING

Operating conditions at the refinery were complicated by the change-over to the chloride process in March and also during the summer months by the usual labour shortage. The change-over was attended by increased metal losses and corrosion problems. By the end of the year these difficulties were being progressively overcome.

Recovery of electrolytic cobalt of high purity was achieved following the change-over. Production gradually increased, and by year-end had reached about 60% of the expected normal rate.

By the end of the year all phases of the modernization and expansion program to increase annual capacity to 30 million pounds of nickel were virtually completed. In the last quarter of the year production substantially exceeded the 30 million pound rate.

The further expansion program designed to increase capacity to 35 million pounds nickel annually was well under way by the close of the year.

NEW CONSTRUCTION

Reference has been made throughout this report to the more important items of construction carried out during the year. Total expenditures for capital account, excluding development and preproduction, amounted to \$4,507,367, of which \$3,627,999 was spent in Canada and \$879,368 in Norway. Some of the larger general items not referred to elsewhere in the report include the following in Canada—purchase of a 60 ton diesel locomotive and slag dump cars, extension to the central warehouse, installation of an ore sampling plant, extension to the ore receiving station, and erection of a new cafeteria to serve the employees; and in Norway—an extension of the change house for employees, a new precious metals laboratory, and additional storage facilities for finished metals.

Ore Position

As a result of the year's intensive and successful exploration efforts, the Company's total ore reserves showed a marked increase. Little change is shown in developed ore at the Falconbridge and McKim mines, although over 1,100,000 tons of ore were withdrawn from these mines for treatment during the year. Development was not sufficiently advanced by year-end at the Hardy and Falconbridge East mines to permit any ore being included in the developed category.

Indicated ore in the Sudbury district, however, showed an increase of 13,881,500 tons resulting from additional ore disclosed by drilling at the Fecunis Lake, East Falconbridge and Strathcona West properties. At the current rate of ore consumption the addition to indicated reserves in 1952 amounted to more than twelve years' requirements. The grade

of the developed ore remains unchanged, but the average grade of the indicated ore is somewhat lower, resulting from the inclusion of lower grade ores at Strathcona West and Fecunis Lake. At Fecunis Lake the large tonnage of high grade ore is accompanied by a substantial amount of low grade. The grade of the indicated ore has been treated conservatively until underground information is in hand.

		Percent	
	Tons	Ni	Cu
Developed ore— Falconbridge and McKim ores	10,091,500	1.64	.87
Indicated ore— Sudbury district holdings	22,895,500	1.63	.95
	<u>32,987,000</u>	<u>1.63</u>	<u>.93</u>

Exploration and Research

In the Sudbury district a total of more than 50,000 feet of diamond drilling was completed. The drilling program was concentrated in the Fecunis Lake - Strathcona section of the Levack area with the purpose of outlining ore zones indicated by previous exploration. In addition, further work was done on the low grade Blezard ore zone and elsewhere in the district.

An active exploration program was continued in the concession area in Newfoundland throughout the year. A number of interesting discoveries were made which will require further work to determine their worth. Drilling on optioned properties in Newfoundland gave further information on geological conditions, but was not very productive in finding ore.

The drilling program on the properties of Maskwa Nickel Chrome Mines Limited in south-eastern Manitoba, to which reference was made in last year's report, could not be carried to completion due to lack of water and fire hazard in the district. Drilling done in the chrome horizon gave low

chrome values. Drilling done in the nickel-copper zones was encouraging and indicated the need for further drilling when conditions permit.

During the year some of the Company ground in the northeast section of the Sudbury district, north of the norite contact, was consolidated with the holdings of others in Northbridge Mines Limited, in which Company Falconbridge obtained the controlling interest. Subsequent exploration on this ground showed interesting mineralization. Further exploration is required.

A number of other prospects were examined during the year, several of which require further investigation.

Research staff and facilities have been expanded with increased emphasis on metallurgical problems and possible new processes, with a view to greater and more economical recovery of the constituents of the ore. Further investigations on the precious metal content of the ores and products are likewise underway.

Financing

With the exception of a mortgage loan in Norway of N. Kr. 5,500,000 (\$918,553) the heavy capital and development expenditures made to the end of 1951 were met from retained earnings of the Company. This resulted in depletion of liquid resources. As predicted in our 1951 report, additional financing was required to carry the expansion programs through 1952. Moneys were obtained from two sources outside the Company.

The contract with an agency of the United States Government, to which reference has been made elsewhere in this report, provided for gross advances to the Company of \$6,000,000 for the purpose of assisting it in meeting expanded production commitments as these are carried out. Net borrowings under the contract, after interest charges and credits earned by the Company to 31st December, 1952, amounted to the equivalent of Can. \$1,981,790.

Further advances will be received by the Company in 1953.

In August, the Company offered for sale to its shareholders 341,025 of its unissued shares at \$14 per share, on a pro rata basis of one share for each ten shares held.. All shares offered were subscribed for with the exception of 75,000 which formed part of the block which Ventures Limited was entitled to purchase. By agreement with the Company, Ventures has agreed to purchase these shares at the issue price of \$14 per share for payment on or before 1st October, 1953.

Credit arrangements have been discussed with the Export-Import Bank of Washington in anticipation of the Company requiring additional funds for expansion of production facilities to a level of 35 million pounds of nickel annually. The Bank has

announced its approval of a \$5,000,000 line of credit in favour of the Company but, owing to other discussions in Washington, no formal loan agreement had been completed and no loans had been made to

the Company by the end of the year.

An analysis of the change in net working capital for the year is given below:

Working capital was increased by—	
Earnings retained within the business—profits less dividends	\$ 763,611
Net advances from an agency of the United States Government	1,981,790
Capital stock issued	3,724,350
	<u>\$6,469,751</u>
Working capital was decreased by—	
Capital, development and preproduction expenditures less \$3,350,680 charged to operations in the year for depreciation and development expenditures written off	\$3,380,841
Long term liabilities paid off—	
instalments on Norwegian loan	91,855
Sundry non-current expenditures—	
Increase in supplies and prepaid expenses	\$ 565,693
Investment in and advances to subsidiaries not consolidated	583,090
Miscellaneous	394,154
	<u>1,542,937</u>
	<u>\$5,015,633</u>
Net increase in working capital	<u>\$1,454,118</u>

Employees

The number of employees in the Falconbridge organization continues to grow. At year-end a total of 2,412 persons were employed in Canada and 1,088 persons at Kristiansand S., Norway, making a total of 3,500, of whom 3,140 were engaged in nickel-copper production, the remainder in the operations of wholly-owned subsidiaries. This rapid growth in employment has created many problems relating to employee welfare. Housing continues to be critically short at Falconbridge, Sudbury and Kristiansand. The Company's increasing activity in the Levack area, where there are no established public communities in the immediate vicinity, creates an additional problem. Completion of a new modern school and a new Legion building at Falconbridge, together with the new cafeteria installed by the Company, have materially improved local conditions there.

Excellent relations existed between the Company and its employees throughout the year. In Canada wage increases were put into effect at the first of the year and again in September, while in Norway an increase became effective on renewal of the collective bargaining agreement. All permanent employees are covered by a pension plan. Falconbridge employees and their dependents in Canada are covered by medical and hospitalization plans which were revised and broadened in 1952.

The Directors are again happy to express their sincere appreciation to all employees of this Company, and to the officers and employees of the subsidiary companies, for their co-operation and successful efforts during the year which resulted in the great accomplishments herein recorded.

On behalf of the Board of Directors,

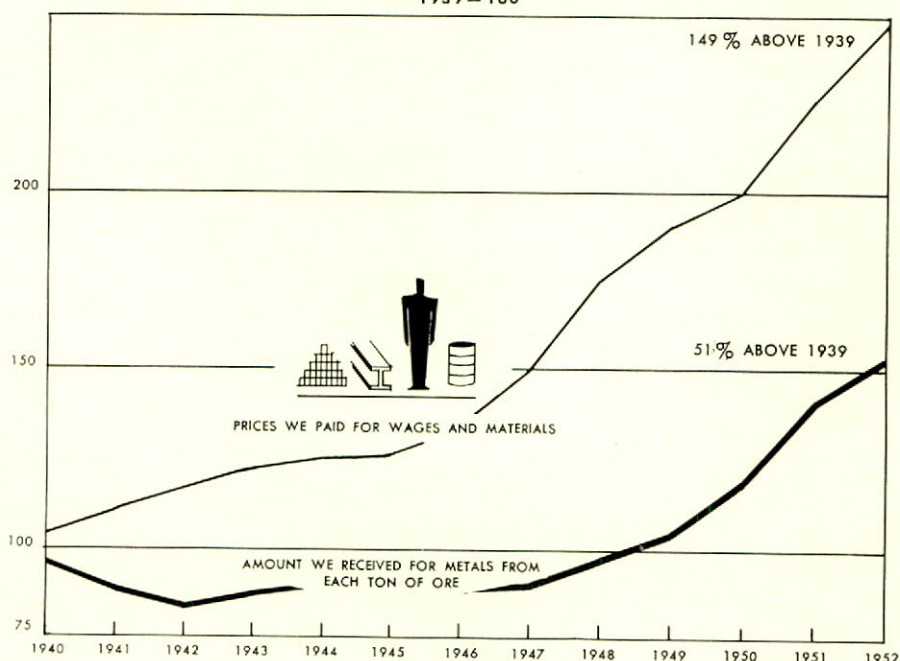
T. LINDSLEY,
President.

H. J. FRASER,
Vice-President and General Manager.

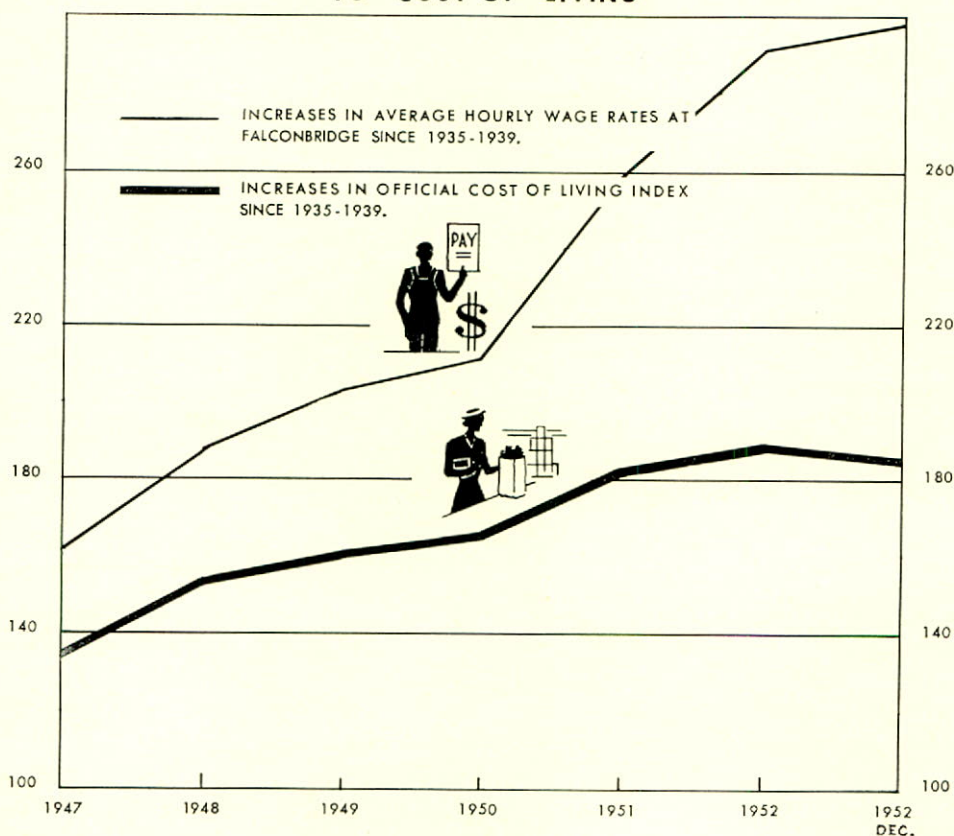
March 27, 1953.

THE PRICE TREND

1939 = 100



HOURLY WAGE RATES COMPARED TO COST OF LIVING



CONSOLIDATED BALANCE SHEET

(WITH COMPARATIVE FIGURES FOR 1951)

ASSETS		1952	1951
CURRENT:			
Cash on hand and in banks		\$ 602,023.86	\$ 651,495.07
Government securities at cost (quoted market value \$2,888,000)		2,886,165.99	1,412,931.87
Accounts receivable—			
Trade	\$ 2,389,511.03		
Sundry	342,373.90	2,731,884.93	2,224,390.70
Inventories as determined and certified by responsible officials and valued at the lower of cost or market, cost being determined on a "last-in, first-out" basis—			
Refined metals	\$ 797,316.75		
Matte and metals in process	2,946,648.80		
Accumulated costs in connection with purchased ores in process	131,315.47	3,875,281.02	4,363,347.45
		\$ 10,095,355.80	\$ 8,652,165.09
INVESTMENT IN SUBSIDIARIES, not consolidated, at cost (Note 2):			
Shareholdings	\$ 933,819.13		
Advances	193,084.67	\$ 1,126,903.80	\$ 326,994.00
FIXED:			
Plant and equipment at cost		\$ 21,871,815.56	\$ 17,374,344.32
Less accumulated allowance for depreciation		12,839,108.90	11,172,554.24
		\$ 9,032,706.66	\$ 6,201,790.08
Mining property and claims at cost		3,410,277.67	3,407,105.72
		\$ 12,442,984.33	\$ 9,608,895.80
OTHER:			
Supplies, at average cost		\$ 2,363,861.21	\$ 2,000,043.01
Prepaid expenses and deferred charges		287,479.31	85,604.41
Sundry security investments at cost less amounts written off (quoted market value \$324,231)		365,161.60	257,383.29
Guarantee deposit with The Hydro-Electric Power Commission of Ontario		298,284.85	52,850.00
Mine development and preproduction expenditures less amounts written off		881,302.58	335,429.10
		\$ 4,196,089.55	\$ 2,731,309.81
		\$ 27,861,333.48	\$ 21,319,364.70

The notes to financial statements are an integral part of the above

To the Shareholders of
Falconbridge Nickel Mines Limited:

AUDITORS

We have examined the consolidated balance sheet of Falconbridge Nickel Mines Limited and its consolidated subsidiaries as at December 31, 1952, and the statements of consolidated profit and loss and earned surplus for the year then ended. Except that it was not practicable to confirm the amount payable to the United States Government as to which we satisfied ourselves as to its substantial accuracy by other means, our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of accounting records and such other auditing procedures as we considered necessary in the circumstances. All our requirements as auditors have been complied with.

In our opinion, the accompanying consolidated balance sheet and statements of consoli-

KEL MINES LIMITED

ATED SUBSIDIARIES

SHEET, DECEMBER 31, 1952

RES FOR DECEMBER 31, 1951)

LIABILITIES		1952	1951
CURRENT:			
Overdraft in Norwegian bank			\$ 44,513.26
Accounts payable and accrued charges	\$ 2,074,840.20		1,512,682.49
Portion of long-term liabilities maturing within one year	191,855.29		91,855.29
Income taxes payable (estimated)	939,245.96		1,567,817.69
	<u>\$ 3,205,941.45</u>		<u>\$ 3,216,868.73</u>
LONG TERM:			
3% mortgage payable in equal semi-annual instalments from June 30, 1953 to December 30, 1961 inclusive (secured by refinery land and plant) (N.Kr. 4,950,000)	\$ 826,697.61	\$ 918,552.90	
Amount due on purchase of shares of wholly-owned subsidiary company payable in annual instalments to September 30, 1955 (secured)	275,000.00		
Net advance from the Government of the United States, including accrued interest thereon at 4%, repayable on or before March 31, 1957 (U.S. \$2,046,574.20) (Note 5)	1,981,790.48		
	<u>\$ 3,083,488.09</u>	<u>\$ 918,552.90</u>	
Less instalments maturing within one year included under current liabilities	191,855.29	91,855.29	
	<u>\$ 2,891,632.80</u>	<u>\$ 826,697.61</u>	
SHAREHOLDERS' EQUITY:			
Capital—			
Authorized—5,000,000 shares of no par value			
Issued —3,676,272 shares of no par value (Note 6)		\$ 11,030,375.19	\$ 7,306,025.19
Earned surplus		10,733,384.04	9,969,773.17
	<u>\$ 21,763,759.23</u>	<u>\$ 17,275,798.36</u>	
On behalf of the Board,			
H. J. FRASER, Director.			
W. S. MORLOCK, Director.			
	<u>\$ 27,861,333.48</u>	<u>\$ 21,319,364.70</u>	

consolidated balance sheet and should be read in conjunction therewith.

S' REPORT

dated profit and loss and earned surplus are properly drawn up so as to exhibit a true and correct view of the state of the affairs of the companies consolidated therein at December 31, 1952, and the results of their operations for the year then ended in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year (except for the change explained in note 4 to the financial statements, in which change we concur) according to the best of our information, the explanations given to us and as shown by the books of the companies.

Toronto, Canada,
March 26, 1953

CLARKSON, GORDON & CO.,
Chartered Accountants.

FALCONBRIDGE NICKEL MINES LIMITED

AND ITS CONSOLIDATED SUBSIDIARIES

STATEMENT OF CONSOLIDATED PROFIT AND LOSS

FOR THE YEAR ENDED DECEMBER 31, 1952

(WITH COMPARATIVE FIGURES FOR THE YEAR ENDED DECEMBER 31, 1951)

	1952	1951
Metal sales and other operating revenues	\$ 24,839,873.07	\$ 20,782,808.24
Cost of sales and operating expenses other than the undermentioned items	\$ 16,080,160.09	\$ 11,903,700.61
Selling, general and administrative expenses	1,018,576.31	840,376.52
	<u>\$ 17,098,736.40</u>	<u>\$ 12,744,077.13</u>
Operating profit before providing for development and preproduction expenditures, depreciation and income taxes	\$ 7,741,136.67	\$ 8,038,731.11
Development and preproduction expenditures written off (Note 4)	\$ 1,678,281.00	\$ 1,083,670.00
Allowance for depreciation	1,672,399.78	1,087,032.16
	<u>\$ 3,350,680.78</u>	<u>\$ 2,170,702.16</u>
Operating profit before income taxes	\$ 4,390,455.89	\$ 5,868,028.95
Other income:		
Dividend from Fahlralloy Canada Limited, a wholly-owned subsidiary, not consolidated (Note 2)	35,050.00	35,050.00
Income from investments	33,005.08	52,189.32
Miscellaneous income	562.70	8,714.82
	<u>\$ 4,459,073.67</u>	<u>\$ 5,963,983.09</u>
Other deductions from income:		
Interest on long-term liabilities	\$ 85,196.98	
Outside exploration and development expenditures	467,674.47	\$ 474,052.00
Net loss on foreign exchange	9,043.23	26,524.84
Net loss on sale of securities	7,918.37	52,430.63
	<u>\$ 569,833.05</u>	<u>\$ 553,007.47</u>
Profit before income taxes	\$ 3,889,240.62	\$ 5,410,975.62
Income taxes (estimated)	1,354,000.00	2,400,000.00
Profit for the year transferred to consolidated earned surplus	<u>\$ 2,535,240.62</u>	<u>\$ 3,010,975.62</u>

STATEMENT OF CONSOLIDATED EARNED SURPLUS

	1952	1951
Balance at beginning of year	\$ 9,969,773.17	\$ 8,663,921.05
Profit for the year	2,535,240.62	3,010,975.62
	<u>\$ 12,505,013.79</u>	<u>\$ 11,674,896.67</u>
Dividends paid	1,771,629.75	1,705,123.50
Balance at end of year	<u>\$ 10,733,384.04</u>	<u>\$ 9,969,773.17</u>

The notes to financial statements are an integral part of the above statements of consolidated profit and loss and earned surplus and should be read in conjunction therewith.

FALCONBRIDGE NICKEL MINES LIMITED

AND ITS CONSOLIDATED SUBSIDIARIES

**STATEMENT OF ASSETS AND LIABILITIES
IN NORWAY**

INCLUDED IN THE CONSOLIDATED BALANCE SHEET

AT DECEMBER 31, 1952

ASSETS

CURRENT:

Cash on hand and in banks	\$	51,781.42	
Accounts receivable		141,670.14	
Inventories of metals—			
Refined metals	\$	720,082.84	
Matte and metals in process		2,206,605.99	2,926,688.83
			\$ 3,120,140.39

FIXED:

Plant and equipment at cost less accumulated allowance for depreciation	\$	3,025,209.61
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OTHER:

Supplies	\$	724,096.39	
Prepaid expenses and deferred charges		79,987.36	804,083.75
			\$ 6,949,433.75

LIABILITIES

CURRENT	\$	309,937.29	
LONG-TERM		734,842.32	1,044,779.61
NET ASSETS IN NORWAY included in the consolidated balance sheet at December 31, 1952			\$ 5,904,654.14

Notes to Financial Statements

1. Assets and liabilities and revenues and expenses in currencies other than Canadian dollars are converted into Canadian funds on the following bases:
 - All assets other than fixed assets and all liabilities other than long-term liabilities at the current quoted rates of exchange at December 31, 1952.
 - Fixed assets and the relative reserves for depreciation at the rates of exchange prevailing when the expenditures on the fixed assets were made.
 - Long-term liabilities at the rates of exchange prevailing when the debts were incurred.
 - Revenues and expenses at approximately the average monthly quoted rates of exchange.
2. The accompanying consolidated balance sheet and statements of consolidated profit and loss and earned surplus represent the consolidation of the accounts of Falconbridge Nickel Mines Limited and two of its wholly-owned subsidiaries, Falconbridge Nikkelverk Aktieselskap and Falconbridge Realty Limited. The accounts of one wholly-owned subsidiary and one majority-owned subsidiary, whose operations are not integrated with those of the Company, have not been consolidated nor have the accounts of one wholly-owned subsidiary acquired in October, 1952.

The Company's equity in the net assets of the unconsolidated subsidiaries is \$473,811.84 in excess of the Company's investment in such subsidiaries. The Company's equity of \$109,737.96 in the net income of the unconsolidated subsidiaries for the year is included in the statement of consolidated profit and loss only to the extent of the dividends of \$35,050 received. No subsidiary sustained a loss during the year.
3. There are commitments outstanding under contracts for construction in progress and for additional equipment amounting to approximately \$955,000.
4. In 1952 the Company wrote off development and preproduction expenditures at the rate of \$1.50 per ton of ore processed instead of \$1.00 per ton as was done in the previous year. If these expenditures had been written off in 1952 on the same basis as in the previous year the net profit for the year would have been increased \$559,427.
5. The contract under which advances are received from the United States Government provides for liquidation of such advances in whole or in part from the credits that will be earned if certain production requirements are met.
6. During the year 266,025 shares were issued for cash at \$14.00 per share. At December 31, 1952, there was a commitment outstanding to sell an additional 75,000 shares at \$14.00 per share on or before October 1, 1953.
7. Subsequent to December 31, 1952, the Company entered into an agreement to issue 5,000 shares and to expend \$500,000 during the next five years on the exploration and development of outside properties.

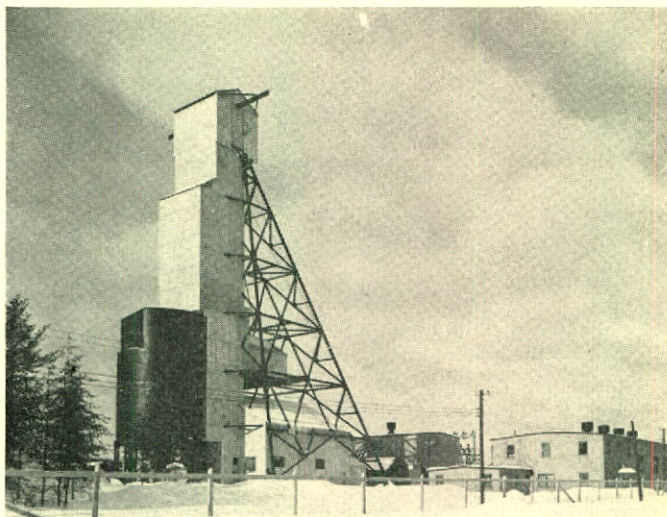
Comparative Summary

Year	Tons Treated		Gross metal sales and other operating revenue	Net profit after taxes and before development and depreciation	Net profit
	Falconbridge Mines	Non Falconbridge Mines			
1930-1942	4,867,822		\$ 62,002,326	\$23,040,493	\$14,216,549
1943	807,048		8,250,525	1,916,055	756,529
1944	830,254		8,849,884	2,128,039	959,907
1945	716,868		6,749,548	1,118,317	637,690
1946	486,516		5,106,364	798,030	516,387
1947	731,925		8,016,254	1,110,870	824,071
1948	821,259		11,508,405	1,916,860	1,502,099
1949	941,929		11,178,732	1,979,993	1,432,307
1950	928,650		17,380,316	4,503,101	2,707,566
1951	1,083,670		20,782,808	5,181,678	3,010,976
1952	1,118,854	10,635	24,839,873	5,885,921	2,535,241
Total	<u>13,334,795</u>	<u>10,635</u>	<u>\$184,665,035</u>	<u>\$49,579,357</u>	<u>\$29,099,322</u>

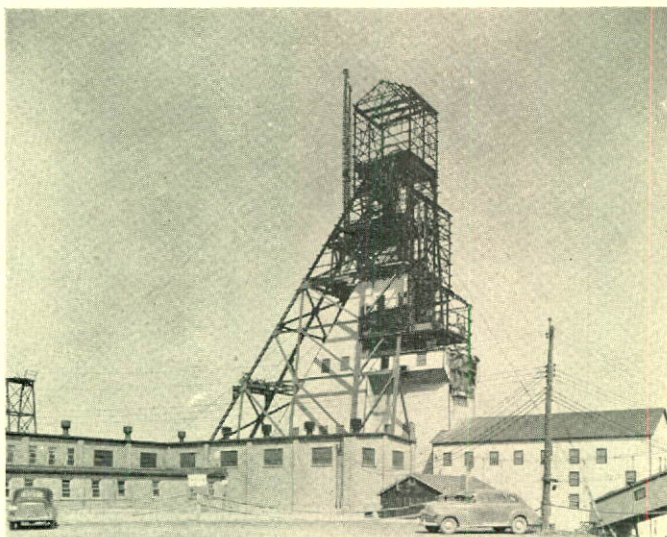
Year	Dividends Paid		Net Capital Expenditures	Net current assets including metal inventories
	Per Share	Amount		
1930-1942	\$ 2.45	\$ 8,135,960	\$ 7,426,986	
1943	.15	500,637	436,649	\$ 6,780,063
1944	.15	500,637	212,213	7,098,092
1945	.15	501,386	108,885	7,893,020
1946	.10	334,751	146,292	8,288,550
1947	.25	836,877	410,895	7,739,497
1948	.35	1,177,152	1,084,001	6,691,011
1949	.35	1,179,497	1,048,949	6,610,799
1950	.40	1,362,545	1,342,859	7,518,269
1951	.50	1,705,123	3,380,983	5,435,296
1952	.50	1,771,630	4,497,471	6,889,414
Total	<u>\$ 5.35</u>	<u>\$18,006,195</u>	<u>\$20,096,183</u>	

Mining Facilities

Permanent headframe and surface buildings at Hardy Mine.



View showing enlargement being made to main Falconbridge headframe without interruption to hoisting operations.



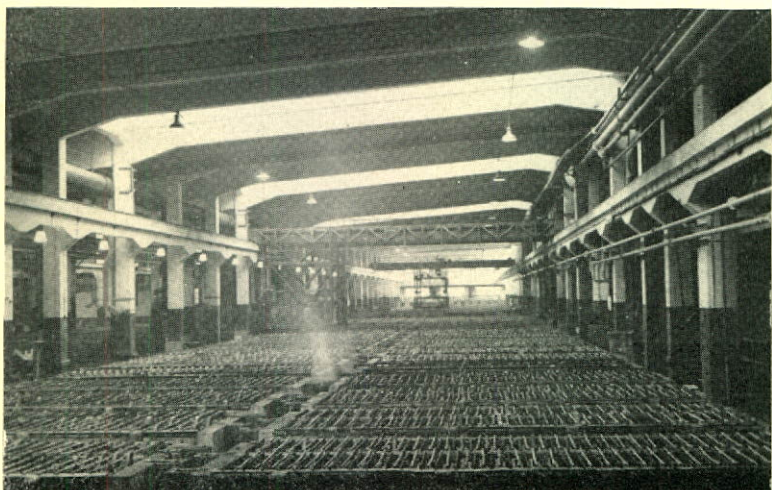
New hoist house and hoisting equipment installed to service main Falconbridge shaft. Relative size of the installation is indicated by the operator at the controls.



Refinery Operations



Forming primary
nickel anodes.



Primary nickel anodes are
converted by electrolysis
into refined cathodes.



Nickel cathodes are shipped
to world markets from our
quay (part of the refinery
plant appears in the
background).





AN AERIAL VIEW OF THE PLANT OF FAHRALLOY CANADA LIMITED, ORILLIA, ONTARIO, TAKEN FEBRUARY, 1953

The recent building extension is at the left and gives approximately 30,000 square feet of floor space, crane serviced, for cleaning room and heat treatment departments. The raised roof sections of existing plant at rear centre are for main moulding floor, sand mixing and sand reclamation sections.

FAHRALLOY CANADA LIMITED

Report of the Board of Directors

To the Shareholders
FAHRALLOY CANADA LIMITED.

The Directors have pleasure in submitting herewith their sixteenth annual report showing statement of the assets and liabilities of the Company as at the 31st of December, 1952, together with the statement of profit and loss for the year ended on that date.

Production during the year again set a new record for the Company, with dollar value showing a 16% and tonnage showing a 6½% increase over 1951. Orders entered were at a high rate during the first six months, but fell off quite sharply during the second half of the year, with the result that our backlog of unfilled orders was materially reduced over the period.

Gross profits were lower during the year on account of increases in wages and materials which were not compensated for by higher selling prices.

Although we were unable to use any of the new plant extension facilities during this period, we have written off maximum allowable depreciation on them resulting in a reduction of net profits.

The plant expansion commenced in April and has progressed as rapidly as could be expected, considering the steps that had to be taken to keep from interfering with production. With all equipment on hand, it is expected that full utilization of new plant and equipment should start early in the second quarter of 1953.

The financial arrangements mentioned in last year's report were carried to completion. The Company issued \$600,000, 5½% first mortgage sinking fund bonds nominally due April 15, 1968, but with flexible retirement privileges which will permit repayment before that date if conditions warrant.

Since the end of September, we have had a firm of management engineers working with us to develop work standards that will allow a large percentage of all work to be placed on an incentive basis. We feel confident that not only will this show a saving to the Company, but also result in increased earnings for our employees.

Dividends were paid during the year of \$50.00 per share, which was the same rate as the previous year.

Mr. W. Dunn of Ventures Limited was elected to the Board of Directors in April, last.

The Directors wish to express their appreciation for the loyal and able services rendered by the staff and employees throughout the year.

On behalf of the Board,

T. G. BEAMENT,

President.

March 19, 1953.

FAHRALLOY CANADA LIMITED

BALANCE SHEET, DECEMBER 31, 1952

(WITH COMPARATIVE FIGURES FOR DECEMBER 31, 1951)

ASSETS		1952	1951
CURRENT:			
Cash on hand and in banks	\$	105,223.25	\$ 38,437.15
Funds on deposit with trust company		254,300.23	
Government of Canada bonds at cost (quoted market value \$51,587)		55,256.25	55,256.25
Trade accounts receivable less allowance for doubtful accounts		187,574.36	210,756.01
Inventory as determined and certified and valued by the management at the lower of laid-down cost or market		319,621.08	323,556.68
	\$	<u>921,975.17</u>	<u>\$ 628,006.09</u>
FIXED, at cost:			
Land	\$	8,221.18	\$ 8,021.41
Buildings, plant, machinery and equipment		1,269,849.25	686,474.19
	\$	<u>1,278,070.43</u>	<u>\$ 694,495.60</u>
Less accumulated allowance for depreciation		587,013.76	484,768.96
	\$	<u>691,056.67</u>	<u>\$ 209,726.64</u>
OTHER:			
Investment in shares of associated companies at cost	\$	50,250.00	\$ 37,126.50
Mortgage receivable		5,000.00	9,000.00
Prepaid expenses		31,442.39	26,522.15
	\$	<u>86,692.39</u>	<u>\$ 72,648.65</u>
	\$	<u>1,699,724.23</u>	<u>\$ 910,381.38</u>
LIABILITIES			
CURRENT:			
Accounts payable and accrued charges	\$	249,904.71	\$ 56,809.76
Income taxes payable		49,013.68	127,453.74
	\$	<u>298,918.39</u>	<u>\$ 184,263.50</u>
LONG TERM:			
5½% First mortgage sinking fund bonds due April 15, 1968	\$	<u>600,000.00</u>	
SHAREHOLDERS' EQUITY:			
Capital:			
Authorized 1,000 shares of \$100 each whereof issued 701	\$	70,100.00	\$ 70,100.00
Premium received on sale of shares		59,700.00	59,700.00
	\$	<u>129,800.00</u>	<u>\$ 129,800.00</u>
Earned surplus		671,005.84	596,317.88
	\$	<u>800,805.84</u>	<u>\$ 726,117.88</u>
On behalf of the Board,			
T. G. BEAMENT, Director.	\$	<u>1,699,724.23</u>	<u>\$ 910,381.38</u>
H. J. FRASER, Director.			

FAHRALLOY CANADA LIMITED

STATEMENT OF PROFIT AND LOSS

FOR THE YEAR ENDED DECEMBER 31, 1952
(WITH COMPARATIVE FIGURES FOR THE YEAR 1951)

	1952	1951
Profit from operations after allowances for depreciation of \$102,244.80 in 1952 and \$19,542.18 in 1951	\$269,058.46	\$402,909.79
Bond interest	17,543.21	
Operating profit before income taxes	\$251,515.25	\$402,909.79
Profit on sale of investments	13,125.00	13,125.00
Net profit before income taxes	\$264,640.25	\$416,034.79
Income taxes	130,000.00	210,000.00
Net profit for the year	<u>\$134,640.25</u>	<u>\$206,034.79</u>

Note: The Company changed the basis used to determine its allowance for depreciation in 1952. If the same basis had been employed as in the previous year the allowance for depreciation would have been \$45,230.64 less and the net profit for the year 1952 would have been increased by \$21,710.71.

STATEMENT OF EARNED SURPLUS

	1952	1951
Balance at beginning of year	\$596,317.88	\$425,333.09
Net profit for the year	134,640.25	206,034.79
	<u>\$730,958.13</u>	<u>\$631,367.88</u>
Dividend paid	\$ 35,050.00	\$ 35,050.00
Expenses of bond issue	24,902.29	
	<u>\$ 59,952.29</u>	<u>\$ 35,050.00</u>
Balance at end of year	<u>\$671,005.84</u>	<u>\$596,317.88</u>

AUDITORS' REPORT

To the Shareholders of
Fahralloy Canada Limited.

We have examined the balance sheet of Fahralloy Canada Limited as at December 31, 1952, and the statements of profit and loss and earned surplus for the year ended on that date. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances. All our requirements as auditors have been complied with.

In our opinion the accompanying balance sheet and statements of profit and loss and earned surplus are properly drawn up so as to exhibit a true and correct view of the state of the affairs of the company as at December 31, 1952, and the results of its operations for the year ended on that date, according to the best of our information and the explanations given to us and as shown by the books of the company.

Toronto, Canada,
March 13, 1953.

CLARKSON, GORDON & CO.,
Chartered Accountants.

Products



FALCONBRIDGE NICKEL MINES LIMITED

NICKEL

Electrolytic Cathodes
Anodes
Malleable Strip
Coin Blanks
Sulphate

COPPER

Electrolytic Cathodes
Anodes

COBALT

Electrolytic Cathodes

PRECIOUS METALS

Gold
Silver
Platinum
Palladium
Iridium
Rhodium
Ruthenium

LIQUID SULPHUR DIOXIDE



FAHRALLOY CANADA LIMITED

Heat, Corrosion and Abrasion Resisting Steels
Carbon Steels

